Self-employment in the downturn

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Self-employment tends to increase during recessions (Picot and Heisz 2000). The recent downturn has been no exception. Between October 2008 and October 2009, self-employment rose by 3.9% in Canada in seasonally adjusted figures, while paid employment fell by 1.6% in the public sector and by 4.1% in the private sector (LaRochelle-Côté and Gilmore 2009). This represents an increase of more than 100,000 self-employed individuals over the period, while the number of paid workers decreased by almost half a million.

Prior to the downturn, the economy experienced a period of sustained job creation, fuelled mainly by an increase in the number of paid workers. Between 1999 and 2007, paid employment increased by almost 300,000 or 2.2% per year on average, while self-employment growth averaged 22,800 per year (0.9%). Hence, self-employment levels remained relatively stagnant over the 2000s, whereas it grew constantly almost every year before 1999.[1]

While the relative decline in self-employment during the 2000s coincided with a decline in attention paid to self-employment issues, the recent increase in self-employment highlighted the need for up-to-date statistical information on the self-employed. Hence, this article chronicles both the long-term trends in self-employment and its recent resurgence using the Labour Force Survey (LFS). Particular attention is paid to the net change in the job and personal characteristics of the self-employed, the dynamics of entry into and exit and out of self-employment implied by job tenure, and supplemental information on the transition from the loss of a paid job to self-employment from the Survey of Labour and Income Dynamics (SLID) (see *Data sources and definitions*).

Data sources and definitions

This study uses data from the monthly **Labour Force Survey** (LFS). The LFS collects information on the labour market activities of the population 15 years of age and older, excluding residents of collective dwellings, aboriginal settlements, and full-time members of the Canadian Forces. Employed individuals are defined as those who worked at a job or business during the reference week of the survey.

In the LFS, seasonally adjusted information is not available for a number of demographic and job characteristics, which must therefore be examined on a year-over-year basis. Because employment last peaked in October 2008, and because the number of self-employed individuals increased considerably during the 12 months that followed, the period from October 2008 to October 2009 represents an opportunity to study the dynamics of self-employment during the most recent employment downturn. Unless otherwise stated, the results of this paper are based on non-seasonally adjusted data.

For the most part, this article focuses on changes in self-employment levels between October 2008 and October 2009. Changes in self-employment represent the number of individuals who became self-employed over the period, minus the number of workers who ceased to be self-employed. Changes in levels should therefore be interpreted as **net** changes in the total number of self-employed workers. As well, this study also includes some discussion about self-employment dynamics over the period, and uses longitudinal data from the **Survey of Labour and Income Dynamics** (SLID) to gauge the extent to which recently laid-off employees became self-employed in the ensuing months.

This study uses a definition of **self-employment** from previous studies (Wannell and Whitfield 1991, and Kamhi and Leung 2005). It is defined as employed individuals who work for themselves or work without pay for a family business, as opposed to paid workers (who are working for 'others').[2] While many are working alone, others may be owners of small businesses and may employ paid workers. Self-employed workers therefore include

- owners of incorporated businesses with employees
- owners of unincorporated businesses with employees
- owners of incorporated businesses without employees
- owners of unincorporated businesses without employees
- unpaid family workers.

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The 2009 increase in self-employment occurred against a backdrop of substantial losses in paid employment, which raises the possibility that a substantial portion of those who lost paid jobs turned to self-employment in order to stay active in the labour market. As such, this article juxtaposes the LFS and SLID to assess the extent to which those who lost paid jobs early in the recession might account for the subsequent surge in self-employment. Results indicate that recently laid-off workers are unlikely to account for the majority of those who became self-employed during the recent downturn.

Long-term trends in self-employment

Self-employed workers can be defined as individuals operating a business for their own profit, as opposed to those who work for 'others' (paid employees). A further distinction can be drawn between businesses with or without help. Self-employed workers without paid help are either working alone or with unpaid help from family members. Examples range from consultants (e.g., computer programmers, freelance writers and training consultants) to stand-alone business operators (e.g., small farmers, street vendors and artists) and to any other type of business activity that does not involve paid employees.

In contrast, the self-employed with paid help are typically owners of small or medium-sized businesses such as restaurants, goods rentals, transportation companies, construction, and personal services. Also included could be health specialists in a private practice with employees or private-practice lawyers with staff. Finally, unpaid family workers are individuals working for the business owned by another member of the family without receiving a formal salary, and many of them are found in agriculture.

In 2009, the 2.7 million self-employed workers comprised 16% of the employed labour force. Of these, two-thirds worked without paid help (incorporated or unincorporated). Over the long term, self-employment rose sharply in the early 1980s and steadily through most of the 1990s before falling back to a plateau in the 2000s (Chart A).

Self-employment rose faster during periods of recession in the early 1980s and 1990s and most of these increases in share were retained in subsequent recoveries. Much of the long-term rise is attributable to those without paid help. Although entrepreneurs with paid help contributed to the growth in self-employment in the early 1980s, the share of the workforce in this category changed little over the next decade and has tapered off since then.

Chart A Self-employment as a percentage of total employed individuals

Source: Statistics Canada, Labour Force Survey, 1976 to 2009.

Self-employment increased amid significant losses in paid employment

Self-employment increased by substantial margins over the course of the recent employment downturn (Table 1). Between October 2008 and October 2009, self-employment increased from 2.66 million to 2.77 million, a net gain of 115,100 (4.3%). This rise in self-

Table 1 Total employed by class of worker

	October 2008	October 2009	Change[1]	
		'000	'000	%
Employed	**17,270.7**	**16,909.4**	**-361.2**	**-2.1**
Self-employed	2,655.5	2,770.5	115.1	4.3
Paid employees	14,615.2	14,138.9	-476.3	-3.3
Full-time	11,902.3	11,530.7	-371.6	-3.1
Part-time	2,712.9	2,608.2	-104.7	-3.9

1. Changes between October 2008 and October 2009 were all significantly different at the 0.05 level.
Note: Similar trends were found with seasonally adjusted data.
Source: Statistics Canada, Labour Force Survey, not seasonally adjusted.

employment occurred against a backdrop of a decline of almost half a million in paid employment (-476,300). Both full-time (-3.1%) and part-time (-3.9%) paid employees were affected by the drop in paid employment.

Although self-employment grew, the number of jobs did not increase in all categories (Table 2). Gains were concentrated among self-employed workers without paid help, particularly among the unincorporated. As a result, the unincorporated self-employed with no paid help represented more than 50% of all self-employed workers in October 2009, up from 48% one year earlier. Other categories did not change significantly.

Characteristics of the increase in self-employment

In October 2008, two-thirds of the self-employed were men compared to 51% of the paid labour force. Over one-half of self-employed workers (55%) were between 35 and 54 years of age while 47% of paid employees were in this age range. Self-employed workers had a similar education profile to paid workers. The distribution of self-employed workers across regions also closely resembled that of paid employees (although they represented a higher share of total employment in Alberta, British Columbia and Saskatchewan). Self-employed workers were more likely than paid employees to live with a spouse and particularly to have a spouse who was also self-employed (representing nearly one-quarter of all self-employed workers).

On the other hand, those who joined the ranks of the self-employed between October 2008 and October 2009 were quite different from those who were self-employed at the beginning of the period (Table 3). Over the 12 months, increases in self-employment

Table 2 Total self-employed by class of worker

	October 2008	October 2009	Change	Contribution to overall increase
	'000		'000	%
Self-employed	**2,655.5**	**2,770.5**	**115.1***	**100.0**
With paid help	874.1	872.5	-1.6	-1.4
Incorporated	614.7	635.6	20.9	18.2
Unincorporated	259.4	236.9	-22.5	-19.6
Without paid help	1,754.5	1,874.2	119.6*	104.0
Incorporated	485.5	477.2	-8.4	-7.3
Unincorporated	1,269.0	1,397.0	128.0*	111.2
Unpaid family workers	26.8	23.9	-3.0	-2.6

* significantly different from October 2008 at the 0.05 level
Source: Statistics Canada, Labour Force Survey, not seasonally adjusted.

Table 3 Self-employed individuals across demographic groups

	October 2008	October 2009	Change
	%		
All	**100.0**	**100.0**	**115,100**
Sex			
Men	65.0	64.1	48,200
Women	35.0	35.9	66,900*
Age			
15 to 24	3.4	3.3	1,200
25 to 34	14.4	13.7	-3,900
35 to 44	26.0	23.5*	-38,600
45 to 54	29.5	29.9	46,500**
55 and over	26.7	29.5*	110,000*
Education level			
At least one university degree	27.6	27.7	34,400
Between high school and university	40.8	40.2	31,300
High school or less	31.6	32.1	49,300**
Region of residence			
Atlantic	5.0	4.9	2,700
Quebec	20.0	21.2	56,300*
Ontario	37.9	37.6	35,400
Manitoba and Saskatchewan	6.7	6.7	7,800
Alberta	13.5	12.9	-1,900
British Columbia[1]	16.9	16.7	14,800
Family status			
Does not have a spouse	26.8	27.6	54,400**
Spouse does not work	10.6	11.5	35,800*
Spouse working - paid employee	38.8	37.7	15,500
Spouse working - self-employed	23.9	23.2	9,400

* significantly different from October 2008 at the 0.05 level; ** at the 0.10 level
1. Includes the Northwest Territories, Yukon and Nunavut as observations from these areas constitute only a tiny fraction of the sample.
Source: Statistics Canada, Labour Force Survey, not seasonally adjusted.

were largely concentrated among women (66,900), those at least age 45 (156,500), individuals with a high school education or less (49,300), individuals living in Quebec (56,300), and those who were either living alone or living with a non-working spouse (90,200). Similar results were found when the focus was restricted to self-employed individuals without paid help.[3] The increase among older individuals was such that they comprised a significantly larger share of the self-employed workforce in October 2009 (30% as opposed to 27% in October 2008).[4] Conversely, the share of self-employed workers age 35 to 44 declined by a significant margin (from 26% to 24%).

Before the downturn, self-employed individuals were distributed across a broad spectrum of industries with concentrations in several. For example, in October 2008, a large proportion of the self-employed worked in professional, scientific and technical industries (15%), and in the mining, quarrying, oil and gas, and construction sector (14%). Other sectors with substantial self-employment included the health care sector; agriculture, forestry, fishing and hunting industries; and other services.

Between October 2008 and October 2009, however, much of the 115,100 increase was concentrated in a few particular industries (Table 4). Most notably, finance and real estate industries recorded gains corresponding to 44% of the total increase in self-employment and their share of self-employment increased from 7% to 8%. The majority of the increase in those industries was due to a jump in the number of workers in the real estate sector and, to a lesser degree, securities, commodity contracts, and other financial investment and related activities. The wholesale trade sector also added 33,000 self-employed workers over the period. On the other hand, self-employment levels varied little in other industries.

In October 2008, most of the self-employed were working full time. Of those who were working part time, only a small portion did so for economic reasons (i.e., because of business conditions or because they could not find a full-time job).[5] Although the number of the self-employed working full time increased by 64,200 over the year, this was not a statistically significant change compared to 2008 levels. However, the number of self-employed individuals who worked part time for economic reasons (and desired a full-time schedule) rose by a significant margin over the period (22,800) even though they normally constitute a very small portion of all self-employed individuals.

Table 4 Self-employed individuals across job characteristics

	October 2008	October 2009	Change
	%		
Industry	**100.0**	**100.0**	**115,100**
Agriculture, forestry, fishing and hunting	8.8	8.3	-4,400
Mining, quarrying, oil and gas, construction	14.2	13.7	3,400
Manufacturing	3.9	3.5	-8,300
Wholesale trade	7.0	7.9**	33,000*
Retail trade	4.4	4.1	-4,100
Transportation and warehousing	5.4	5.5	10,300
Information, cultural, arts and recreation	4.8	4.9	10,200
Finance and real estate	6.5	8.1*	50,200*
Professional, scientific, technical	15.3	15.1	11,600
Management and support	6.4	6.1	-700
Accommodation and food	3.5	3.6	7,600
Other services	8.7	8.9	15,700
Health care and social assistance	8.8	8.3	-5,400
Education and public administration	2.2	2.0	-4,000
Full- and part-time status			
Full-time	78.8	77.9	64,200
Part-time for economic reasons and wanted full-time	4.8	5.4	22,800*
Part-time for non-economic reasons	16.4	16.7	28,100

* significantly different from October 2008 at the 0.05 level; ** at the 0.10 level
Source: Statistics Canada, Labour Force Survey, not seasonally adjusted.

Flows into and out of self-employment

To this point, the analysis has focused on **net** changes in self employment—the differences from one year to the next. As Lin, Picot and Yates (1999) demonstrate, there are substantial flows into and out of self-employment that are large relative to the stock of self-employment in any given year. The study of entries and exits yields more detailed information about those entering and exiting self-employment in any period.

Entry into and exit out of self-employment have the following relationship with self-employment levels:

Self-employment in October 2009 = Self-employment in October 2008 + (Entrants – Exits)

where 'entrants' refers to the number of self-employed individuals who became self-employed between October 2008 and October 2009, and 'exits' refers to the number of self-employed who ceased to be self-employed (in their main job) over the same period.[6] Because the Labour Force Survey does not collect longitudinal information over the entire period for the same individuals, an indirect method must be designed to estimate entry and exit flows.

One strategy is to use job duration to estimate the number of employees who recently became self-employed. For example, entrants can be estimated by counting those who, in October 2009, had been self-employed for 12 months or less. Then exits can be estimated by calculating the difference between self-employment levels in October 2009 and self-employment levels in 2008 plus new entrants:

Exits = Self-employment in October 2009 – (Self-employment in October 2008 + Entrants).

Between October 2008 and October 2009, 284,500 individuals were estimated to have entered self-employment, while 169,500 exited self-employment (Table 5), for a net increase of 115,000. Net changes in self-employment therefore concealed a substantial degree of transition into and out of self-employment.

For the most part, new entrants (or the 'newly' self-employed) were predominantly those without paid help (85%) and most were unincorporated (71%). Exits were less concentrated among the self-employed without help (72%) and, relative to the starting size, the greatest exit rate occurred among the unincorporated with paid help. This group also had the lowest entry rate and thus provided the largest opposing force to the overall growth in self-employment. The incorporated self-employed with paid help were the most stable during this period, having both the lowest entry and exit rates. But since their entry rate was almost four times their exit rate, they more than offset the decline among unincorporated employers.

Transition between loss of paid jobs and self-employment

From October 2008 to October 2009, the major losses in paid jobs and increases in self-employed jobs did not take place at the same time. Most of the losses in paid employment took place in the first five months of the downturn, as nearly 400,000 such jobs disappeared (in seasonally adjusted figures). At the same time, self-employment remained stable. In the seven months that followed (between March and October 2009), the number of self-employed individuals increased by more than 100,000, while the number of paid employees declined by much lower margins (-85,600 in seasonally adjusted figures). Such figures raise the possibility that the increase in self-employment was mostly due to recently laid-off employees having been 'pushed' into self-employment.[7]

Table 5 Entry into and exit out of self-employment

	October 2008	October 2009	Entrants[1]	Exits[2]
			'000	
Self-employed	**2,655.5**	**2,770.5**	**284.5**	**-169.5**
With paid help	874.1	872.5	39.0	-40.6
Incorporated	614.7	635.6	28.3	-7.4
Unincorporated	259.4	236.9	10.7	-33.2
Without paid help	1,754.5	1,874.2*	242.1	-122.5
Incorporated	485.5	477.2	41.3	-49.6
Unincorporated	1,269.0	1,397.0*	200.9	-72.9
Unpaid family workers	26.8	23.9	3.4	-6.3
			%	
Self-employed	**100.0**	**100.0**	**100.0**	**100.0**
With paid help	32.9	31.5	13.7	24.0
Incorporated	23.1	22.9	9.9	4.4
Unincorporated	9.8	8.6*	3.8	19.6
Without paid help	66.1	67.6**	85.1	72.3
Incorporated	18.3	17.2	14.5	29.3
Unincorporated	47.8	50.4*	70.6	43.0
Unpaid family workers	1.0	0.9	1.2	3.7

* significantly different from October 2008 at the 0.05 level; ** at the 0.10 level
1. Self-employed workers with tenure of 12 months or less.
2. Estimated figure (see equation 2).
Source: Statistics Canada, Labour Force Survey, not seasonally adjusted.

A closer look indicates that the increase in self-employment did not take place in groups that sustained the most employment losses (with the possible exception of changes across educational attainment). Employment losses between October 2008 and October 2009 were concentrated among youth, men, workers with lower levels of education, and those working in manufacturing and construction industries (LaRochelle-Côté and Gilmore 2009). In contrast, the increase in self-employment was concentrated among women, older workers and those working in finance and real estate industries. Thus the newly self-employed appeared quite different from paid employees who lost their jobs earlier in the recession.

Longitudinal data covering the economic downturn would be required to definitively track the transitions into self-employment, but they are not currently available.[8] However, an empirical strategy can be designed to examine the plausibility that large numbers of laid-off employees fuelled the growth in self-employment. The strategy is based on the use of tenure variables in the LFS to identify the number of paid employees who have been laid-off because of economic reasons in the first five months of the downturn, and the number of those who became self-employed in the seven months that followed.

Because self-employment growth took place in the seven months before October 2009, our self-employment 'candidates' should include paid workers who lost their jobs after October 2008 and were still without a job in March 2009. To obtain a profile of such workers, we identified individuals who had been without a job for five months or less in March 2009, and who had lost their jobs because of economic conditions (e.g., because of business conditions, the company went out of business, or they had been dismissed). According to the LFS, 598,400 individuals met these criteria in March 2009—the hypothetical pool for the transition to self-employment. Similarly, the number who became self-employed in the seven-month period that followed (between April 2009 and October 2009) was estimated using job tenure information from October 2009, and is defined as the number of individuals who were self-employed in their main job for seven months or less. As of October 2009, 184,600 individuals fit that definition.[9]

Since most jobs have elements of skill and knowledge that are industry-specific, those moving into self-employment should be more likely to remain in the industry in which they were previously employed. So if many of the newly self-employed come from the pool of laid-off employees, then the industry distribution of the former could bear some resemblance to the latter.

The industrial classification of recently laid-off employees does not closely align with that of the newly self-employed (Table 6). For example, laid-off workers were concentrated in manufacturing, and in the mining, quarrying, oil and gas, and construction sector. Together, these two sectors accounted for almost 50% of all jobs lost due to economic conditions between October 2008 and March 2009, but only 16% were newly self-employed in the next seven months. In contrast, nearly one out of every five newly self-employed workers were in the professional, scientific and technical sector. Four other service industries accounted for a combined share of about 40% of the newly self-employed: the wholesale trade sector; the management and support services sector; the health care and social assistance sector; and other services. If laid-off employees were driving the increase in self-employment, many would be changing industries.

On the other hand, the number of laid-off workers in the first five months of the downturn was such that even low percentages translated into high numbers of layoffs in some industries. For example, professional, scientific and technical jobs represented only 5% of all employees laid off between October and March, but because of the large number of layoffs over that period, this translated into 27,700 jobs in that industry alone—not far from the 33,400 increase in the number of self-employed workers seen in this industry in the seven months that followed. Should recently laid-off employees choose to join self-employment in large numbers, layoffs could potentially explain a good deal of the increase in self-employment in some industries.

The extent to which recently laid-off employees switch to self-employment can be verified by computing 'transition rates' from another data source, the Survey of Labour and Income Dynamics (SLID). Although SLID does not yet provide information on the recent economic downturn, employment to self-employment transition rates can be calculated for earlier years. For example, paid employees who lost their main jobs for economic reasons between October 2006 and March 2007 can provide a basis for comparison.[10] The share that experienced self-employment as a main job at any point in time between April 2007 and October 2007 can then be calculated. The process is repeated for all years available in SLID (from 1993/1994 to 2006/2007).

Table 6 Laid-off paid employees and newly self-employed

	Laid-off paid employees (October 2008 to March 2009)		Newly self-employed (April 2009 to October 2009)	
		%		%
Industry	**598,400**	**100.0**	**184,600**	**100.0**
Agriculture, forestry, fishing and hunting	15,900	2.7	6,100	3.3
Mining, quarrying, oil and gas, construction	123,000	20.6	26,400	14.3
Manufacturing	168,100	28.1	2,800	1.5
Wholesale trade	60,100	10.0	14,800	8.0
Retail trade	24,900	4.2	4,000	2.2
Transportation and warehousing	32,000	5.3	8,400	4.5
Information, cultural, arts and recreation	15,400	2.6	12,600	6.8
Finance and real estate	13,300	2.2	8,700	4.7
Professional, scientific, technical	27,700	4.6	33,400	18.1
Management and support	33,600	5.6	16,800	9.1
Accommodation and food	37,100	6.2	6,600	3.6
Other services	24,200	4.1	22,100	12.0
Health care and social assistance	12,300	2.1	15,900	8.6
Education and public administration	10,800	1.8	6,000	3.2

Source: Statistics Canada, Labour Force Survey, not seasonally adjusted.

In any given year, most of those who experienced a layoff between October of the previous year and March became re-employed at some point between April and October (from a high of 92% to a low of 73%, for an average re-employment rate of 87%). Of those who became re-employed, a relatively small portion became self-employed. The share of October-to-March paid employees who became self-employed after a layoff varied from a low of 2% in 2005/2006 (a year of low self-employment job creation) to a high of 11% in 1994/1995, when the economy was still dealing with the previous employment downturn. The average transition rate over the period was 5%.

If one were to assume that the re-employment rate for those who were still laid-off in March of 2009 was close to the average for the previous 15 years (87%), it would mean that approximately 520,600 of the 598,400 who were still laid-off in March 2009 found work between April and October 2009. If the transition rate to self-employment were low (as in most years), for instance 5%, then layoffs could have translated into 26,000 new self-employed workers. Conversely, a high transition rate of, say 12% (which would be higher than at any point in time in 14 years of data), would result in more than 78,100 newly self-employed workers, more than one-third of the total. If the rate were somewhere between these two extremes at 8% (which was the transition rate seen in 2006/2007, the most recent year available in SLID), then this would correspond to 41,600 new self-employed workers between April and October 2009. The implication of these scenarios is that recently laid-off workers could account for a significant minority of the newly self-employed. However, even the highest scenario shows laid-off employees accounting for just over one-third of the newly self-employed.[11] This suggests that other factors (potential earnings, access to credit, managerial skills, desire for flexible work hours, other personal characteristics, etc.) might have 'pulled' a significant number of workers into self-employment without the impetus of a layoff.[12] It might also mean that other types of economic factors (e.g., weak labour demand, layoff of a spouse) led more people than usual into self-employment.

Summary

Between October 2008 and October 2009, self-employment increased by more than 115,000, while the number of paid employees declined by nearly half a million. Most of the increase in self-employment was due to self-employed workers without paid help. The spike in self-employment came at the end of a decade in which the self-employment rate changed little.

Not all groups experienced equivalent increases in self-employment. Higher increases were seen among older workers, women, and those living in Quebec. The influx of self-employment was concentrated in a few industries. The finance and real estate sector led the way with an increase of 50,000. Wholesale trade industries also recorded a large increase. One-fifth of the net increase in self-employment was accounted for by those working on a part-time basis for economic reasons but preferring full-time work.

The period was also characterized by substantial flows both into and out of self-employment. Between October 2008 and October 2009, 284,500 individuals joined the ranks of the self-employed, while 169,500 ceased to work as self-employed workers. Net changes in self-employment therefore concealed a substantial degree of entry into and exit out of self-employment.

The decrease in paid employment predated the increase in self-employment. This raises the possibility that a large portion of the newly self-employed could have been paid employees who lost their jobs in the first few months of the downturn. With the exception of workers in the mining, quarrying, oil and gas, and construction industries, the industrial profile of those who became self-employed workers did not closely match the profile of those who were laid-off after the first five months of the downturn. Moreover, longitudinal data for other time periods indicate that a relatively low proportion of paid employees became self-employed workers in the months following the loss of their paid jobs. The implication is that layoffs likely explained some, but not all, of the recent increase in self-employment.

Notes

1. One exception was a sharp increase in self-employment levels between 2006 and 2007 (117,000) within the context of a strong labour market. Before the 2000s, self-employment levels increased almost every year since the LFS began collecting data in the current format in 1976.

2. Respondents in the LFS must describe themselves as self-employed to be identified as such. They must also have worked in a job or for a business at the time of the reference week. This study might therefore exclude individuals with a limited degree of involvement in a business (through a limited partnership, for example), or self-employed individuals who temporarily suspended their business activities.

3. Even though the total increase in self-employment was largely concentrated in Quebec, Alberta accounted for nearly one-quarter of the increase in self-employed workers with no paid help. This is because Alberta also lost a good deal of self-employed workers with paid help over the period. Also worthy of note is the fact that families with one working spouse saw a much smaller increase in the number of self-employed workers with no paid help.

4. Although population aging is increasing the absolute number of the older self-employed, the self-employment rate for older workers hasn't changed much in recent years and remains below its 1999 peak.

5. The distinction between the two types of part-time work (economic versus non-economic reasons) was necessary because part-time work is not necessarily descriptive of a lack of work for the self-employed.

6. This method excludes those who experienced a brief stint of self-employment between October 2008 and October 2009. However, it represents the best possible approximation of entries and exits based on cross-sectional data.

7. Although this is a different labour market than in the 1990s, empirical studies from the early 2000s provide mixed evidence in favour of this hypothesis. For instance, Moore and Mueller (2002) found that 'push' factors (unemployment rate, long unemployment spells, and longer spells between jobs) explained some, but not all, of the surge in self-employment at the end of the 1990s, and that the effect was stronger among men. Schuetze (2000) also found that rising unemployment reduced the opportunity cost of entering self-employment. By and large, the literature suggests that other factors, such as wealth, potential gains or other personal characteristics, also contribute to 'pull' workers into self-employment. See Georgellis et al. (2005) for a complete discussion of push and pull factors associated with self-employment.

8. The Labour Force Survey has a longitudinal component but it is primarily for survey design purposes. Although statistical techniques (such as 'raking') could potentially be used to derive gross flows consistent with stock levels on a month-over-month basis, this study is concerned with labour market transitions over a much longer period of time. Furthermore, following individuals over six months in the LFS could lead to spurious results as estimates might be affected by various sources of discrepancy, known as margin error problems. For a discussion of potential margin error problems in labour survey data, see Frazis et al. (2005).

9. Layoffs may include individuals who were unemployed in October of 2008 but had one job spell or more in the five months that followed. Similarly, 'new' self-employed workers exclude those who experimented with self-employment during the period but were without a job in October 2009 or earlier.

10. More precisely, monthly information in SLID is used to identify all paid employees who lost their jobs because of economic conditions at any point in time between October 2006 and March 2007. Although primarily intended for income statistics, SLID also provides longitudinal information on a number of labour market statistics that are conceptually similar to the LFS, including statistics on labour market participation and class of worker.

11. Some employees could choose to rely on income assistance programs (like employment insurance benefits) and might therefore take longer than a few months to set up a business. However, the transition rates changed very little when examined over a longer time period in SLID. Furthermore, only a fraction of those who are paid employees are self-employed in a second job (less than 2% as of 2008), making it unlikely that recently laid-off paid employees turned to an already existing self-employed business to stay in the labour market. Finally, a sensitivity analysis that was conducted to determine whether the transition rate varied across age groups showed that laid-off workers in different age groups had similar transition rates into self-employment.

12. See Georgellis et al. (2005) for a review of these factors.

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